

## **DISCLAIMER**

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## **APPLICATION OF**

**OLD DOMINION ELECTRIC COOPERATIVE**

**CASE NO. PUE-2001-00303**

**For a certificate of public convenience and  
necessity for electric generation facilities in  
Louisa County**

## **REPORT OF DEBORAH V. ELLENBERG, CHIEF HEARING EXAMINER**

**June 28, 2002**

On May 17, 2001, Old Dominion Electric Cooperative (“ODEC” or the “Company”) filed an application for a certificate of public convenience and necessity to construct and operate electric generation facilities at a site near Gordonsville in Louisa County. The application was not complete, however, until June 19, 2001, when ODEC supplemented its application. ODEC plans to build combustion turbine facilities that will produce a summer rating of approximately 463 MW when fired by natural gas at 94°F, and 604 MW when fired by oil at 0°F. ODEC intends for the facilities to be owned by Louisa Generation, LLC, a not-for-profit cooperative whose only member is ODEC. Commercial operation of the facilities is proposed to begin by May 1, 2003. ODEC represents that the facilities will supply the electric power needs of each of its twelve distribution cooperative members, ten in Virginia, and two in Delaware and Maryland.

The Commission docketed the case, set a date for public hearing, required ODEC to provide notice of its application, and assigned the case to a hearing examiner by order dated July 12, 2001.

On August 15, 2001, Columbia Gas of Virginia, Inc. (“Columbia”) filed a Notice of Participation. Columbia holds certificates of public convenience and necessity issued by the Commission to provide natural gas distribution service in Louisa County where the facilities are proposed to be located.

On September 24, 2001, in accordance with the procedural schedule established by the Commission, the Piedmont Environmental Council (“PEC”) filed comments on the application.

The public hearing was convened on November 14, 2001. John A. Pirko, Esquire, and T. Borden Ellis, Esquire, appeared as counsel for the Company. Rebecca W. Hartz, Esquire, and C. Meade Browder, Jr., Esquire, appeared as counsel for the Staff, and Kodwo Ghartey-Tagoe, Esquire, appeared as counsel for Columbia. Two public witnesses also appeared and offered testimony, Daniel Holmes on behalf of PEC and John H. Snyder. All prefiled testimony was offered into evidence without causing the witnesses to take the witness stand. A copy of the transcript is filed with this Report.

On January 16, 2002, the Commission remanded another case in which a developer proposed to construct and operate electric generation facilities in Fluvanna County.<sup>1</sup> The Commission concluded that certain environmental issues raised in that case had not been adequately addressed, and remanded the case to the Hearing Examiner to receive additional evidence. Some of the issues to be addressed in that remand were similar to several of the issues raised by the public witnesses in this case. Accordingly, on February 6, 2002, a ruling was entered identifying the issues raised by public witnesses, providing ODEC an opportunity to file supplemental evidence on those issues, and scheduling a hearing to receive that limited additional evidence.

On February 28, 2002, however, ODEC filed a Motion for Reconsideration. Among other things, ODEC maintained that each of the issues identified in the ruling had been adequately addressed in the existing record. Staff filed a response to the Motion on March 6, 2002. Therein Staff took issue with several assertions in the Motion but took no position on whether the hearing to reopen the record should be canceled. By ruling dated March 8, 2002, the hearing to reopen the record was canceled. The ruling to reopen the record was intended to allow the applicant an opportunity to offer evidence on issues the Commission had considered critical to approval in the *Tenaska* case and were raised by public witnesses in this case. I concluded that ODEC should be afforded such an opportunity since it could not have anticipated all of these criteria, with particular note for the breadth of concern with the cumulative air impact of a proposed facility. However, since ODEC, the applicant with the burden of proving its case, did not want the opportunity to offer additional evidence, its motion was granted and the hearing was canceled.

On March 29, 2002, ODEC filed a Motion to Supplement Record. Rule 5 VAC 5-20-110 of the Commission Rules of Practice and Procedure (“Procedural Rules”) provides that responses to a motion must be filed within 14 days of the filing of the motion. No response opposing the motion was filed. ODEC sought to include a copy of its Stationary Source Permit to Construct and Operate issued by the Virginia Department of Environmental Quality (“DEQ”) that was issued subsequent to the hearing in this case. It sought to supplement the record with an environmental analysis and a supplemental analysis for a water supply line prepared in August and September 2001. ODEC also sought to offer a cumulative impact analysis into the record, and represented that it had engaged Trinity Consultants, Inc. (“Trinity”), to prepare a cumulative impact analysis for the Louisa Project after the hearing examiner ruling to reopen the record was issued. In this Motion, ODEC contended that “[t]he cumulative impact analysis was essentially complete when subsequent events resulted in cancellation of the scheduled hearing.”<sup>2</sup> Of course, the “subsequent events” were its own contention that the record was adequate and its request to have the hearing canceled. The proffered documents, however, are very relevant to the Commission’s consideration of this case and directly address several of the issues found critical in the *Tenaska* case. Neither Staff nor Columbia sought an opportunity to cross-examine a witness on the supplemental information or otherwise objected to its receipt into the record. PEC did write to register its concern with the introduction of the new information.<sup>3</sup> It suggested a hearing should be convened to provide public witnesses a chance to comment on the new material. The Commission’s Procedural Rules, 5 VAC 5-20-80 C, however,

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<sup>1</sup>*Application of Tenaska Virginia Partners, L.P. for approval of a certificate of public convenience and necessity pursuant to Virginia Code § 56-265.2, an exemption from Chapter 10 of Title 56, and interim approval to make financial commitments and undertake preliminary construction work*, Case No. PUE010039, Order (January 16, 2002) (“*Tenaska Remand Order*”).

<sup>2</sup>ODEC Motion to Supplement Record at 3 (March 29, 2002).

<sup>3</sup>PEC letter dated May 16, 2002.

specifically limit the role of a public witness such as PEC in a case. Here, PEC has already provided both written and oral comments, and has addressed the issues covered by the supplemental testimony. No additional opportunity to comment is necessary, and public witnesses cannot cross-examine the applicant on the additional information. Therefore, I find that the Motion to Supplement the Record should be granted, and no further hearings are necessary at this time.

On May 9, 2002, Columbia filed a letter advising the Commission that it expected to be the owner of the gas lateral that will supply natural gas to the facility, but that it was also still negotiating with ODEC over its interest in partial ownership of the gas facilities.

Finally, on June 4, 2002, the DEQ filed a letter commenting on the supplemental material submitted by Trinity on behalf of ODEC. It advised that the approach taken by Trinity was a reasonable way to address the cumulative impact issue. It affirmed that the report contains detailed information and the results show that there would be only minimal increases in air quality levels of SO<sub>2</sub>, NO<sub>x</sub>, CO, PM<sub>10</sub>, and ozone. The DEQ also observed that the Trinity report included the latest version of DEQ's analysis to estimate the impact of a number of proposed facilities on ozone levels around the state.<sup>4</sup>

### **SUMMARY OF THE RECORD**

In support of its application, ODEC offered the direct testimony of Kenneth F. Alexander<sup>5</sup> and Peter F. Gallini,<sup>6</sup> and the direct<sup>7</sup> and rebuttal testimonies<sup>8</sup> of David N. Smith. Mr. Alexander, vice president of asset development and production, described ODEC, the proposed facility, and the need for the facility. He testified that ODEC is a Virginia utility aggregation cooperative. ODEC supplies the electric power needs of twelve distribution cooperative members, ten of which are in Virginia. By the end of 1999, the combined member systems of ODEC served nearly 423,000 consumers.<sup>9</sup> The peak demand in 1999 was approximately 1,374 MW with energy sales of approximately 6,680 GWh and a load factor of approximately 58%.<sup>10</sup> ODEC serves its members through a combination of company-owned generation and power purchases. ODEC represents that most of its power purchase contracts will terminate or expire on a staggered basis over the next few years, with most ending by May 2004. It contends that it must construct generating resources or enter into reliable and economic power purchase contracts to continue to meet its members' requirements.

ODEC developed a Request for Proposals ("RFP") to determine the availability, price, terms, and conditions associated with its options. The RFP was issued on September 1, 1999. A detailed cost estimate for a build option was provided to the Commission Staff prior to opening any bids but was not released to potential bidders. After evaluation of the costs and risks associated with the bids received, ODEC determined that the self-build option was the most economical,

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<sup>4</sup>DEQ letter dated June 4, 2002.

<sup>5</sup>Exhibit KFA-1.

<sup>6</sup>Exhibit PFG-2.

<sup>7</sup>Exhibit DNS-3.

<sup>8</sup>Exhibit DNS-4.

<sup>9</sup>Exhibit KFA-1, at 3.

<sup>10</sup>Application at 3.

effective and reliable solution for supplying its needs.<sup>11</sup> ODEC adopted a power supply plan that included the construction of three simple-cycle combustion turbine generation projects. The proposed Louisa facilities comprise one of those projects.

The Louisa project site is near the town of Gordonsville in Louisa County, Virginia. It consists of approximately 92 acres,<sup>12</sup> of which 35 acres will be developed. There is an existing 230 kV transmission line and natural gas pipelines on or near the site. Adjacent properties are industrial and agricultural.

The project includes four General Electric (“GE”) Frame 7EA combustion turbines and one GE Frame 7FA combustion turbine.<sup>13</sup> The units will be capable of burning natural gas and No. 2 fuel oil. All units will use state-of-the-art dry, low nitrogen oxide (“NO<sub>x</sub>”) burner technology<sup>14</sup> to minimize NO<sub>x</sub> and carbon monoxide (“CO”) emissions. The overnight construction cost for the project is \$193.3 million.<sup>15</sup> For financing purposes, the project will be owned by Louisa Generation, LLC, (“Louisa Generation”) a not-for-profit cooperative that has only one member, ODEC.<sup>16</sup> ODEC proposes to finance the project with a loan guarantee from the Rural Utilities Service of the U.S. Department of Agriculture (“RUS”).<sup>17</sup> Such a financing arrangement will not affect any other assets or indentures of ODEC if the facilities are owned by Louisa Generation. ODEC proposes to manage the construction of the project, and further, will contract to take or pay for the output from the facilities.

Peter F. Gallini, director of power supply for ODEC, also presented testimony. He discussed the need for additional energy resulting from the expiration of several ODEC purchase power contracts. He also addressed ODEC’s 1999 RFP in more detail. He explained that bids were received from four bidders totaling 26 projects and an aggregate capacity of 9,000 MW.<sup>18</sup> The evaluation identified two proposals from one of the four bidders as the best resource to fulfill ODEC’s short-term needs.<sup>19</sup> A contract was negotiated. ODEC determined its self-build options were the best choice for meeting its longer term needs. Mr. Gallini explained that the self-build option developed by ODEC included three generation projects; the one at issue in this case, one in Rock Springs, Maryland, and another one in Virginia.<sup>20</sup> The low cost of those options was the primary reason they were chosen. Also, none of the other proposals were based on resources in Virginia and location affected their cost and reliability.<sup>21</sup>

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<sup>11</sup>Exhibit KFA-1, at 3.

<sup>12</sup>*Id.* at 8; Application at 5.

<sup>13</sup>Application at 5.

<sup>14</sup>*Id.*

<sup>15</sup>Exhibit KFA-1, at 8.

<sup>16</sup>*Id.* at 4.

<sup>17</sup>*Id.*

<sup>18</sup>Exhibit PFG-2, at 4.

<sup>19</sup>*Id.* at 5.

<sup>20</sup>*Id.*; *Application of ODEC for a certificate to construct, own, and operate generation facilities in Fauquier County*, Case No. PUE-2002-00003.

<sup>21</sup>Exhibit PFG-2, at 5.

ODEC also offered the testimony of David N. Smith, manager of environmental licensing and compliance. He described the required environmental permitting and licensing processes as well as the environmental impacts associated with the construction and operation of the Louisa facilities. He testified that the turbines will operate as peaking units, and that the combustion turbines proposed for the project produce the lowest concentrations of pollutants of any turbines commercially available.<sup>22</sup> Therefore, the limited number of hours of operation and the use of natural gas as the primary fuel will result in a low level of emissions. Air dispersion modeling was performed and showed that airborne emissions will not significantly contribute to exceedence of the National Ambient Air Quality Standards (“NAAQS”) for any criteria pollutant. Three air permits were required: a state construction permit, a Title IV (“Acid Rain”) permit, and an operating permit.<sup>23</sup> The construction and Acid Rain permit applications had been submitted to the DEQ at the time of the hearing. ODEC had applied for an air permit as a minor source of criteria pollutants due to the limited number of hours of operation.

Mr. Smith also testified that the maximum annual amount of water required is estimated to be 22.56 million gallons (“MG”), and the annual average is estimated to be 20.16 MG.<sup>24</sup> The proposed source for water is the Bowler's Mill Reservoir constructed as a water supply and flood retention reservoir. There are presently no water supply consumers using the reservoir. The safe yield from the reservoir is 0.897 million gallons per day with a minimum release of the lesser of the inflow rate, or 20% of the mean annual flow of Dove Fork.<sup>25</sup> The maximum withdrawal rate for the project is estimated to be 250 to 300 gallons per minute or 0.36 to 0.43 million gallons per day.<sup>26</sup> A Water Protection permit is required to withdraw water from the reservoir.<sup>27</sup> Potable water needs of approximately 16,500 gallons will be supplied by groundwater.<sup>28</sup>

Wastewater will be sent to the Rapidan Service Authority Gordonsville Sewage Treatment Plant.<sup>29</sup> The volume is expected to be approximately 2.4 million gallons on an annual basis. Mr. Smith also opined that the project will not have a significant impact on surface or groundwater. A Virginia Pollutant Discharge Elimination System permit may also be required by the DEQ for storm water discharge but it is expected to be diverted to a retention pond.<sup>30</sup>

Mr. Smith discussed the water pipeline to be constructed from the Reservoir to the project.<sup>31</sup> He also testified that two fuel oil storage tanks with a capacity of approximately one million gallons each will be constructed and will be designed to meet Virginia's Above Ground Storage Tank regulations.<sup>32</sup>

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<sup>22</sup>Exhibit DNS-3, at 3.

<sup>23</sup>Id.

<sup>24</sup>Id. at 4.

<sup>25</sup>Id. at 4.

<sup>26</sup>Id. at 5.

<sup>27</sup>Id.

<sup>28</sup>Id. at 4.

<sup>29</sup>Id. at 5.

<sup>30</sup>Id. at 5.

<sup>31</sup>Id. at 5-6.

<sup>32</sup>Id. at 7.

Mr. Smith testified that noise from the facilities would not be excessive; and the project would have no impact on historic, threatened and endangered species, wetlands or other environmentally sensitive areas. He asserts that the project will have no adverse visual impacts. Existing terrain and forest block the view of the project on three sides. The project will be primarily visible only from Klockner Road.<sup>33</sup>

Staff presented the testimony of John A. Stevens,<sup>34</sup> Mary E. Owens,<sup>35</sup> and Jarilaos Stavrou.<sup>36</sup> Mr. Stevens, a senior utilities engineer with the Division of Energy Regulation, offered testimony describing ODEC, the project, the criteria against which the project should be evaluated, the need for the facility, and the technical viability of this developer.

He testified that ODEC has historically been a net purchaser of capacity and energy to meet members' requirements. It owns generating resources representing approximately 45% of its current capacity requirements and 72% of its energy requirements on the Virginia mainland.<sup>37</sup> The balance of its requirements are purchased from several different sources. Mr. Stevens confirmed that existing purchase power contracts will terminate on a staggered basis over the next few years, and most will have expired by mid-2004.<sup>38</sup>

Columbia is certificated to provide natural gas service to the project site, and thus offers one source of access to natural gas. Columbia participated in this case. It does not oppose the project but seeks to protect its rights under its certificate. ODEC also intends to access the interstate pipelines of Williams Companies, Inc. ("Williams"), which is two miles southeast of the site, and Columbia Gas Transmission Corporation ("TCO"), which is less than a mile to the southwest. ODEC intends to rely on the spot market for gas, and has several viable options.<sup>39</sup>

The units also will be capable of burning fuel oil. There will be two oil tanks, each having one million gallons of storage capacity, and an associate oil truck unloading facility. A two million-gallon tank will store water to suppress NO<sub>x</sub> formation when the units are burning oil.

Mr. Stevens offered testimony that no additional transmission lines will be needed to reach the project site. The existing Gordonsville-South Anna 230 kV lines of Virginia Electric and Power Company d/b/a Dominion Virginia Power ("Dominion Virginia Power") will be bifurcated and connected to a three breaker ring bus switchyard.<sup>40</sup> The additional costs of interconnection will be borne by ODEC.

He also addressed the impact on the rates of other regulated utilities. He testified that the project could impact ODEC's fuel costs and the fuel factor paid by retail customers who purchase from the member cooperatives.<sup>41</sup> However, the project will provide capacity that is needed to

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<sup>33</sup>Id. at 8.

<sup>34</sup>Exhibit JAS-5.

<sup>35</sup>Exhibit MEO-6.

<sup>36</sup>Exhibit JS-7.

<sup>37</sup>Exhibit JAS-5, at 4-5.

<sup>38</sup>Id.

<sup>39</sup>Id. at 11.

<sup>40</sup>Id. at 6.

<sup>41</sup>Id. at 7.

replace existing power purchase contracts that will terminate over the next few years. Mr. Stevens concluded that, based on the RFP evaluation, the Louisa facilities are a critical part of the most cost-effective and reliable alternative for meeting the capacity needs.<sup>42</sup>

Mr. Stevens opined that the technical viability of a power plant project such as the one proposed by ODEC depends upon the capability of the developer, the reasonableness of the development plan and the developer's progress in implementing the plan. ODEC has previous construction experience on the Clover Power Station in Halifax County, Virginia.<sup>43</sup> It has also just finished planning and permitting a project in Maryland similar to the one proposed herein. ODEC proposes to contract with an experienced construction firm to complete the Louisa project. Mr. Stevens testified that ODEC has a well-developed plan, is capable of completing the project, and has made substantial progress in obtaining permits.

Mr. Stevens sponsored comments and recommendations from DEQ on the impact of the project on the environment. The DEQ offered comments and recommendations in several specific areas: (1) water quality, water resources, and wetlands; (2) wildlife resources; (3) natural heritage resources; (4) air quality; (5) erosion and sediment control and stormwater management; (6) solid and hazardous waste management; (7) pesticides and herbicides; (8) forest and tree protection; (9) water supply and sewerage facilities; (10) recreation resources; (11) transportation; (12) historic and archaeological resources; and (13) pollution.<sup>44</sup>

He observed that the PEC had filed written comments opposing the facilities.<sup>45</sup> The PEC urges the Commission to consider the cumulative impact of the facilities and all other electric generating projects proposed in Virginia. Its recommended analysis would include the impact on the local community and quality of life, water supply, water quality, air quality, natural gas supply, and electric transmission capacity.

Mr. Stevens concluded that the project generally meets the criteria delineated in the Code of Virginia and that the project is consistent with the overall public interest. Mr. Stevens recommended the Commission approve this project conditioned on compliance with the DEQ's recommendations.<sup>46</sup>

Mary E. Owens, a principal financial analyst in the Division of Economics and Finance, also filed testimony. She addressed the financial ability of the applicant to develop the project. For financing purposes the project will be owned and operated by Louisa Generation, however, it is wholly owned by ODEC. She reported that ODEC's credit rating was recently re-evaluated by the three credit rating agencies. Standard & Poor's affirmed its "A+" rating, Moody's affirmed its rating of "A3," and Fitch affirmed its "A" rating.<sup>47</sup> The ratings generally reflect the agencies' views that ODEC has a strong and growing service area, a largely residential customer base, and a strong financial performance record.<sup>48</sup> She confirmed that ODEC intends to finance the project with a

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<sup>42</sup>Id. at 16.

<sup>43</sup>Id. at 10.

<sup>44</sup>Id. at 8-10, and Appendix A.

<sup>45</sup>Id. at 15.

<sup>46</sup>Id. at 16-17.

<sup>47</sup>Exhibit MEO-6, at 3-4.

<sup>48</sup>Id. at 4.

RUS loan. By establishing a separate not-for-profit limited liability company, the loan will not affect the other assets or indentures of ODEC. Pending a decision by RUS on the loan application, ODEC has issued \$215 million of 10-year taxable bonds. If RUS funds are not available and the proceeds from the bonds are exhausted, ODEC would use its \$115 million lines of credit or issue additional bonds.<sup>49</sup> Ms. Owens concluded that ODEC has access to the financial resources necessary to construct, own and operate the project, and concurs with Staff witness Stevens' recommendation to approve the project.<sup>50</sup>

Staff next offered the testimony of Jarilaos Stavrou, a principal research analyst in the Commission's Division of Economics and Finance. His testimony described ODEC's load forecasts and resource plan supply requirements in its service territory on the Virginia mainland. He addressed the methodology used by ODEC to prepare demand forecasts, and the reasonableness of the results.<sup>51</sup> He concluded that ODEC's forecasts of energy sales and load growth appear consistent with similar forecasts made by other Virginia utilities.<sup>52</sup> He also discussed the economic impact of the facility and the public interest. He concluded that from the point of view of economic development and growth, and the promotion of a more competitive electric power industry in Virginia, the facilities appear to be reasonable and in the public interest.<sup>53</sup>

ODEC filed the rebuttal testimony of David N. Smith who focused on the concerns raised and the conditions recommended by the DEQ.<sup>54</sup> In his rebuttal testimony, Mr. Smith testified that the DEQ had completed a multi-source ozone model that included the Louisa project as well as four other new generation sources, but he did not identify those other sources.<sup>55</sup> He testified that the results of the DEQ model indicated that the cumulative impact from these facilities was so small that it was not discernable.<sup>56</sup> Mr. Smith also argued that cumulative impact modeling should be considered only when there is a reasonable likelihood that the cumulative impact of projects reasonably expected to be developed may significantly impact the air quality in Virginia.<sup>57</sup> He further asserted that it was not necessary to conduct cumulative impact studies on pollutants other than NO<sub>x</sub> and volatile organic compounds ("VOCs") which are the emissions that are precursors to the formation of ozone.

He testified that there was no reason for the Commission to be concerned about impacts to water quality because the Louisa project is a peaking plant, and water consumption will be minimal.<sup>58</sup> He also contends that the Louisa project does not require dry cooling or air-cooled condensers to help conserve water as suggested by the PEC. Such equipment is used with steam generators such as a combined-cycle combustion turbine, but not with simple-cycle combustion

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<sup>49</sup>Id. at 4.

<sup>50</sup>Id. at 5.

<sup>51</sup>Exhibit JS-7.

<sup>52</sup>Id. at 4.

<sup>53</sup>Id. at 6.

<sup>54</sup>Exhibit DNS-4.

<sup>55</sup>Id. at 2.

<sup>56</sup>Exhibit DNS-4, at 2.

<sup>57</sup>Id. at 3.

<sup>58</sup>Id. at 5.



turbines as used in the design of this project. No steam is generated, and thus neither dry cooling nor air-cooled condensers would effect any change.<sup>59</sup>

The DEQ offered only limited comments on ODEC's rebuttal. The DEQ clarified that while analyzing the impacts from the Louisa facilities alone, there were predicted concentrations exceeding PSD air quality modeling significant impact levels for sulfur dioxide ("SO<sub>2</sub>") and particulate matter ("PM<sub>10</sub>") emissions. A multi-source modeling was thus initially required for those pollutants but subsequent discussions resulted in ODEC accepting certain limitations in its permit that rendered the multi-source modeling for SO<sub>2</sub> unnecessary.<sup>60</sup> DEQ also clarified that the multi-source air quality modeling for PM<sub>10</sub> emissions resulted in a predicted violation of the 24-hour PM<sub>10</sub> standard, but in DEQ's opinion the ODEC facility did not significantly contribute to the predicted violation. The PSD permitting rules therefore allowed DEQ to permit the ODEC facility. At the same time DEQ investigated the source of the predicted violation and has completed steps to prevent the predicted violation by working with the contributing source within the modeling area.<sup>61</sup>

Columbia did not present the testimony of a witness, but offered a Stipulation<sup>62</sup> signed by ODEC, Staff, and Columbia. Therein, the signatories agreed that Columbia holds the certificate to provide natural gas service in Louisa County including the proposed site of the project. Natural gas will be supplied to the facility through the distribution and/or transmission of Williams, TCo, or Columbia. It was understood that the Applicant would construct, own, and operate the piping between the meter station and the facilities. That plant piping will be located wholly on ODEC's property and is considered a part of the facilities. ODEC agreed that it would not use the plant piping to serve any other facility except additional generation units that might be added to its Louisa facilities without further Commission approval. It also agreed to notify the Commission if one or more of the gas laterals are to be owned by an entity other than Williams or TCo.

Columbia subsequently filed a letter on May 9, 2002, in which it advised that it is currently anticipated to be the owner of the gas lateral and related facilities to supply natural gas to ODEC. Columbia was continuing to negotiate the potential that ODEC may maintain a future partial ownership interest in the gas lateral. They noted that if such an agreement is reached, ODEC will file a certificate application to authorize its partial ownership in the pipeline lateral.<sup>63</sup>

Two public witnesses offered testimony at the public hearing. Daniel Holmes, who had also filed written comments on September 20, 2001, testified on behalf of the PEC.<sup>64</sup> He raised five specific concerns with the proposed facility. He first asserted that ODEC should perform a more comprehensive cumulative air emissions impact study.<sup>65</sup> The PEC also contended that the plant could use a dry cooling technology that would reduce water usage from the plant by 90 to 95%. Mr. Holmes testified that several other proposed projects were proposing such a technology to conserve water usage.<sup>66</sup> The third issue raised by the PEC was its concern with the traffic generated by

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<sup>59</sup>Id. at 7.

<sup>60</sup>Exhibit DEQ-8.

<sup>61</sup>Id.

<sup>62</sup>Exhibit JS-9.

<sup>63</sup>May 9, 2002, letter from Columbia.

<sup>64</sup>Transcript 21-29.

<sup>65</sup>Id. at 22-23.

<sup>66</sup>Id. at 23-24, 28.

ODEC's use of fuel oil, and more specifically, refilling the fuel storage tanks.<sup>67</sup> The fourth concern was with the adequacy of the emergency response plan related to groundwater contamination and evacuation during an emergency.<sup>68</sup> The fifth and final concern raised by the PEC was with the adverse impact on the historic and scenic resources in the area, particularly on Montpelier and the Landmark National Forest.<sup>69</sup>

Mr. John H. Snyder also offered public testimony, and added his concern over air emissions, tanker traffic, and the visual impact on the historic assets in the area.<sup>70</sup>

Subsequent to the hearing in this case the Commission remanded another case in which a developer proposed to construct and operate an electric generation facility in Fluvanna County.<sup>71</sup> The Commission concluded that certain issues raised in that case had not been adequately addressed. It remanded the case to the Hearing Examiner to receive additional evidence. Some of the issues addressed in that remand are similar to several of the issues raised by the public witnesses in this case, including concern with the cumulative effect on air quality from existing and proposed facilities, water usage, fuel oil tanker traffic, and the adequacy of the emergency response plan.

Thus, ODEC was afforded an opportunity to supplement this record on those specific issues, and most notably on the impact on this area of cumulative air emissions from existing and proposed power plants. Although it initially declined that opportunity, it filed a Motion to Supplement Record on March 29, 2002. As noted above, that Motion should be granted.

ODEC included in its supplemental information a copy of the stationary source permit issued by the DEQ to construct and operate the facilities. That permit was issued January 14, 2002, and authorizes ODEC to construct and operate five simple-cycle combustion turbines and auxiliary equipment on the Louisa site.<sup>72</sup>

ODEC also supplemented the record with an extensive environmental analysis ("EEA") which had been prepared in August 2001. The purpose of the EEA was to evaluate the potential impacts resulting from construction of the Louisa project. The EEA was prepared in compliance with the policies and procedures of the RUS as part of its loan process, and therein ODEC defined several potential impacts.

ODEC also filed a cumulative impact analysis (the "Trinity Report") performed by Trinity Consultants.<sup>73</sup> That analysis addressed the current level of air quality in Louisa County and surrounding counties, and the cumulative impact of the proposed facility and other existing and proposed facilities on the air quality in Louisa and surrounding counties.

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<sup>67</sup>Id. at 24.

<sup>68</sup>Id.

<sup>69</sup>Id. at 25.

<sup>70</sup>Id. at 29-30.

<sup>71</sup>*Tenaska Remand Order.*

<sup>72</sup>Motion to Supplement Record, March 29, 2002, Attachment 1.

<sup>73</sup>Motion to Supplement Record, March 29, 2002, Attachment 3.

## **DISCUSSION**

### *Statutory Standard*

The application in this case was filed prior to January 1, 2002, and accordingly, ODEC sought approval under, and offered evidence to support, the findings required by Virginia Code § 56-265.2 B. The Virginia Electric Utility Restructuring Act,<sup>74</sup> however, mandates that “[o]n and after January 1, 2002, the generation of electric energy shall no longer be subject to regulation under this title [Title 56 Public Service Companies] except as specified in this chapter [The Restructuring Act].”

The Commission has also held that the provisions of the Restructuring Act operate to supplant the requirements for approval contained in Code § 56-234.3 and 56-265.2 on and after January 1, 2002.<sup>75</sup> The Commission found:

[Section] 56-580 D is designed to replace § 56-265.2 with respect to generation. Specifically, much of the text of § 56-580 D that authorizes the Commission to permit the construction of generating facilities is drawn virtually verbatim from § 56-265.2 B. The material difference is that § 56-580 D requires only two of the three findings required under § 56-265.2 B, eliminating the requirement that a proposed facility will have no material adverse effect upon the rates paid by customers of any regulated public utility in the Commonwealth (footnotes omitted).<sup>76</sup>

Section 56-580 D provides in applicable part:

D. The Commission may permit the construction and operation of electrical generating facilities upon a finding that such generating facility and associated facilities including transmission lines and equipment (i) will have no material adverse effect upon reliability of electric service provided by any regulated public utility and (ii) are not otherwise contrary to the public interest. In review of its petition for a certificate to construct and operate a generating facility described in this subsection, the Commission shall give consideration to the effect of the facility and associated facilities, including transmission lines and equipment, on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact as provided in § 56-46.1.

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<sup>74</sup>Virginia Code § 56-576 *et. seq.*

<sup>75</sup>*Commonwealth of Virginia at the relation of the State Corporation Commission Ex Parte: In the matter of amending filing requirements for applications to construct and operate electric generating facilities*, Case No. PUE010313, Order dated August 3, 2001, (“*Filing Requirements*”).

<sup>76</sup>*Id.* at 4.

Virginia Code § 56-46.1 requires that the Commission:

shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact. In such proceedings it shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection; and if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted pursuant to Article 3 (§ 15.2-2223 et seq.) of Chapter 22 of Title 15.2. Additionally, the Commission (i) may consider the effect of the proposed facility on economic development within the Commonwealth and (ii) shall consider any improvements in service reliability that may result from the construction of such facility.

The Commission has summarized those requirements, and has found that it:

- (a) shall consider the impact of the facility on the environment.
- (b) shall establish conditions that may be desirable or necessary to minimize any adverse environmental impacts resulting from the facility.
- (c) shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection, and, if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted pursuant to Article 3 (§ 15.2-2223 et seq.) of Chapter 22 of Title 15.2.
- (d) shall consider any improvements in service reliability that may result from the construction of such facility.
- (e) may consider the effect of the proposed facility on economic development within the Commonwealth.<sup>77</sup>

Finally, section 56-596 A is also relevant, and it requires “[t]hat in all relevant proceedings pursuant to this Act, the Commission shall take into consideration, among other things, the goals of advancement of competition and economic development in the Commonwealth.”

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<sup>77</sup>*Tenaska Remand Order* at 12.

The Commission has specifically addressed the statutory criteria and the findings that must be made, in several cases, and in some detail in *Tenaska*.<sup>78</sup> Therein the Commission considered reliability, competition, rates, environment, economic development, and the public interest. Although ODEC is a utility aggregation cooperative under the Code of Virginia, and not an independent power plant developer with no history in Virginia, those Code sections and Commission precedent are equally applicable to this case.

### *Reliability*

Thus, the first criteria that must be considered is the effect of the proposed project on the reliability of electric service provided by any regulated electric public utility. "[T]he Commission must find that the proposed facility and associated facilities will have no material adverse effect... the Commission shall also consider any improvements in service reliability that may result."<sup>79</sup>

The record in this case is clear that the proposed facility will have no material adverse effect on electric service reliability. The facility will interconnect with a 230 kV transmission line owned by Dominion Virginia Power. Dominion Virginia Power completed a facilities study on April 6, 1999. It thereby determined that no additional transmission lines needed to be constructed to interconnect the generation facilities to the transmission grid. The existing Gordonsville-South Anna 230 kV line will be bifurcated and connected to a three breaker ring bus switchyard.<sup>80</sup> Staff witness Stevens also testified that the ODEC project will have no adverse effect on the reliability of Dominion Virginia Power. The Facilities Study did identify the need to add a second 500/230 kV transformer at the North Anna Nuclear Power Station. Approximately 31 miles of the Gordonsville-North Anna 230 kV line also will be reconducted to handle the additional power flow, but ODEC will bear the additional costs resulting from the interconnection.<sup>81</sup>

The Commission shall also consider any improvements in service reliability that may result from a proposed project. Although no evidence was presented that this project would enhance the reliability of service by Dominion Virginia Power, evidence was presented that this project will enable ODEC to serve the increasing demands of its customers, including many Virginia retail electric cooperatives. That enhanced ability to serve those cooperatives will ultimately improve the reliability of service to their retail customers.

Indeed, ODEC offered clear and uncontested testimony that additional capacity is needed to address its member cooperatives' needs. ODEC has historically been a net purchaser of capacity and energy. ODEC owns some generating resources but a significant portion of its requirements are met through purchase power contracts. Many of those contracts are scheduled to expire by May

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<sup>78</sup>*Application of Tenaska Virginia Partners, L.P. for approval of a certificate of public convenience and necessity pursuant to Virginia Code § 56-265.2, an exemption from Chapter 10 of Title 56, and interim approval to make financial commitments and undertake preliminary construction work*, Case No. PUE010039 ("*Tenaska*"), Order (January 16, 2002) ("*Tenaska Remand Order*") and Final Order (April 19, 2002); *Application of Mirant*, Case No. PUE-2001-00430, Remand Order (April 29, 2002); *Application of CINCAP*, Case No. PUE-2001-00169, Remand Order (April 29, 2002) and Order on Reconsideration (June 5, 2002); *Application of Kinder Morgan Virginia*, Case No. PUE-2001-00423, Remand Order (April 29, 2002).

<sup>79</sup>*Tenaska Remand Order* at 13.

<sup>80</sup>Exhibit KFA-1, at 8.

<sup>81</sup>Exhibit JAS-5, at 6-7.

2004. As shown in the chart below, existing resources will be inadequate to address the projected demands without the Louisa project.

### **Demand and Capacity Projections<sup>82</sup>**

		2002	2003	2004	2005
Summer Peak Demand	MW	1,426.2	1,477.7	1,529.0	1,578.5
Existing Resources	MW	1,615.3	1,224.0	699.8	699.8
Reserves w/o Louisa	MW	189.1	(253.7)	(829.3)	(878.8)
Reserve Margin	%	13.3%	-17.2%	-54.2%	-55.7%
Louisa Summer Capacity	MW	0	462.8	462.8	462.8
Resources including Louisa	MW	1,615.3	1,686.8	1,162.6	1,162.6
Reserve Margin Including Louisa	%	13.3%	14.2%	-24.0%	-26.4%
Summer Peak Demand is from Old Dominion's 2000 Power Requirements Study. Existing Resources include Old Dominion's ownership in North Anna Nuclear Power Station and Clover Coal Station, purchases from AEP, Virginia Power and Williams and the purchase of reserves from Virginia Power and AEP.					

Thus, this project will clearly improve service reliability to ODEC members and their customers.

### *Environment*

One of the areas of the greatest concern to the Commission is the impact a proposed facility may have on the environment.<sup>83</sup> In this case the impact of the project on several environmental areas must be considered.

#### (1) Air

This project, as all new stationary sources of air pollution, was required to obtain, and has received, an air permit from DEQ.<sup>84</sup> The permit is required whether a project is in an area where the NAAQS are exceeded (a non-attainment area) or an area where the air quality is acceptable (an attainment or unclassifiable area). The NAAQS set limits based on human health and welfare on the maximum pollutants specific ground-level concentrations at a given location. Those standards have been established for SO<sub>2</sub>, PM<sub>10</sub>, CO, NO<sub>x</sub>, lead and ozone.<sup>85</sup>

The project also must comply with new source performance standards ("NSPS") which are designed to minimize impacts on the environment regardless of existing or projected ambient pollution levels. The NSPS have been established for approximately 50 types of sources including combustion turbine generation facilities.<sup>86</sup>

<sup>82</sup>Exhibit PFG-2, Attachment 1.

<sup>83</sup>*Tenaska Remand Order* at 16.

<sup>84</sup>Motion to Supplement Record, March 29, 2002, Attachment 1.

<sup>85</sup>Trinity Report, at 1-3.

<sup>86</sup>Motion to Supplement the Record, March 29, 2002, Att. 2, EA, at 6-6.

No exceedences of the NAAQS were observed from any criteria pollutant as a result of air impact analyses. Based on studies conducted, however, NO<sub>x</sub>, CO and PM<sub>10</sub> will be admitted in amounts above the prevention of significant deterioration (“PSD”) emission levels.

**Potential Emissions and PSD Significant Emission Rates<sup>\*87</sup>**

<b>Pollutant</b>	<b>Potential Emissions (tons per year)</b>	<b>PSD Significance Level (tons per year)</b>
NO <sub>x</sub>	249**	40
CO	244**	100
PM <sub>10</sub>	55**	15
VOC	12	40
SO <sub>2</sub>	24	40

\*Emissions for 1 General Electric (GE) 7FA and 4 GE 7EA turbines, 100% load, 1600 hours natural gas, 140 hours fuel oil, one natural gas heater, and one firewater engine.

\*\*For pollutants that exceed the PSD significant emission rates, BACT will be determined.

Dispersion modeling was performed for those pollutants, and the Best Available Control Technology (“BACT”) was evaluated.

The DEQ required use of BACT.<sup>88</sup> The original configuration for the facility was four GE Type 7FA combustion turbines. The GE units had the capability to achieve a NO<sub>x</sub> emission rate of 9 ppm (“parts per million”) using low NO<sub>x</sub> burner technology. At the ODEC project in Rock Springs, Maryland, located in a severe non-attainment area, emissions control is held to a higher standard than the BACT under the Clean Air Act. The higher standard, the Lowest Achievable Emission Rate (“LAER”), is not limited by cost considerations. The Maryland Department of the Environment and Region III of the Environmental Protection Agency concluded that the GE low NO<sub>x</sub> burners met the LAER standard.<sup>89</sup> Although ODEC was not required to install equipment meeting the LAER standard in Louisa County, it intended to do so, but only one GE Type 7FA unit was available for delivery in late 2002. Therefore, ODEC ordered the one available Type 7FA unit and four Type 7EA units that each provide about half of the capacity of the Type 7FA units to achieve the same overall capacity for the proposed project. The Type 7EA units have a slightly higher heat rate but will still offer ODEC the flexibility to schedule and ramp units in smaller increments and meet the targeted May 2003 in-service date. Those units do meet the BACT standards. The advance dry low-NO<sub>x</sub> system inherent in the proposed GE Frame 7EA combustion turbines in conjunction with good operation and maintenance practices offer the BACT to control emissions.

The analyses performed as part of the applications submitted to DEQ for construction and operating air permits considered the Louisa facility alone. The Commission, however, has also been concerned with the cumulative impact of one project combined with all other existing and proposed power plants on the quality of air in Virginia.<sup>90</sup> ODEC therefore submitted additional information on cumulative impact. The Trinity Report presented by ODEC referred to the

<sup>87</sup>Id.

<sup>88</sup>Id. at 6-7.

<sup>89</sup>Exhibit KFA-1, at 6.

<sup>90</sup>*Tenaska Remand Order.*

definition of cumulative impact as stated by the President's Council on Environmental Quality.<sup>91</sup>

"Cumulative impact" is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor or collectively significant actions taking place over a period of time. (citation omitted).

Trinity conducted the cumulative impact analysis by considering the existing air quality in the area surrounding the ODEC Louisa facility and the potential impact from emissions of major criteria pollutants<sup>92</sup> from 23 electric generating facilities existing or proposed in Virginia at the time of the study, including the ODEC Louisa facility. The combined impact of the 23 proposed plants in Virginia was estimated using the EPA's latest approved air dispersion modeling. The incremental impact of the Louisa facility and the combined impact from the 22 other proposed plants was added to the worst case background air quality or the highest pollutant concentrations measured at nearby monitoring stations over the past five years of record to estimate the future worst case air quality in Louisa County and the surrounding Counties of Albemarle, Fluvanna, Goochland, Hanover, Orange, and Spotsylvania. Trinity reported that such a conservative cumulative impact analysis is likely to overstate the impact, yet demonstrates that the facility will have no adverse impact on air quality.

**Cumulative Impact Analysis for Louisa County and  
The Surrounding Counties<sup>93</sup>**

Pollutant Name	Averaging Period	VA County	Maximum Background Concentration (µg/m <sup>3</sup> )	Maximum Modeled Concentration (µg/m <sup>3</sup> )		Total Predicted Concentration (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )
				All 23 Plants*	Old Dominion Louisa		
NO <sub>2</sub>	Annual	Orange	21	0.715	0.353	21.715	100
PM <sub>10</sub>	Annual	Albemarle	32	0.312	0.002	32.312	50
PM <sub>10</sub>	24-hour	Albemarle	66	8.047	7.401	74.047	150
SO <sub>2</sub>	Annual	Fluvanna	10	0.094	0.001	10.094	80
SO <sub>2</sub>	24-hour	Albemarle	30	20.800	19.582	50.800	365
SO <sub>2</sub>	3-hour	Orange	80	84.437	84.370	164.437	1,300
CO	8-hour	Orange	2,330	66.673	65.003	2,396.673	10,000
CO	1-hour	Albemarle	6,640	140.562	129.986	6,780.562	40,000

\*The maximum modeled concentrations shown for all 23 proposed plants includes the contributions of the Old Dominion Louisa Generating Station.

When added to the worst case background air quality, the combined impact will neither cause nor contribute to any violation of the NAAQS for PM<sub>10</sub>, SO<sub>2</sub>, O<sub>2</sub>, CO, or NO<sub>x</sub> emissions in Louisa County or the surrounding counties. The Trinity Report also graphically summarized the cumulative impact assessment; those summaries are attached to this Report.

<sup>91</sup> Motion to Supplement, Attachment 3, Executive Summary at page vi.

<sup>92</sup> The Trinity Report did not address fine particulate matter ("PM<sub>2.5</sub>") or 8-hour ozone monitoring.

<sup>93</sup> Motion to Supplement, March 29, 2002, Att. 3, Trinity Report at 1-9.



The Trinity analysis next addressed the impact of emissions on ground level ozone concentration. Ozone is not directly emitted, but is formed due to a complex chemical reaction involving NO<sub>2</sub>, VOC, and sunlight.<sup>94</sup> A multi-source dispersion model is required to assess the impact of proposed power plants on ozone formation. The DEQ has developed such modeling capabilities and uses a baseline year of actual emissions including sources of NO<sub>x</sub> and VOCs in Virginia. It considers emissions from mobile sources, including cars; stationary sources, such as power plants; and biogenetic sources or naturally occurring sources of emissions. The DEQ ozone model analysis was based on 16 of the 23 proposed power plants. The Louisa generation station was included in the 16 proposed plants modeled.<sup>95</sup>

The DEQ cumulative results predict that the maximum net ozone concentration attributable to the 16 proposed power plants will be between 2.0 and 2.5 parts per billion ("ppb") in Louisa County and the surrounding area. The DEQ staff noted that it considered the predicted results (0-2.5 ppb) to be so minimal that they are within the "noise" or error level of the model used. Trinity scaled the results of the DEQ analysis to account for all 23 proposed plants, assuming that they were actually constructed and operated at their maximum NO<sub>x</sub> emission rates. The increase in ground level ozone concentration was projected to be less than four ppb. The increase due to the 23 proposed plants would be less than 5% of the levels for ground level ozone concentration established by the EPA to protect the public health and human welfare. Trinity concluded that the impact from the ODEC Louisa generating facility will not cause or contribute to a violation of the ozone NAAQS in Louisa or the surrounding counties. However, it should be clearly noted that the scaled contribution from all 23 plants added to the background concentrations does approach the NAAQS levels for 1-hour ozone; and no analysis was provided to project 8-hour ozone levels. The cumulative impact for 1-hour ozone is also graphically summarized and is attached hereto.

ODEC also reported that the EPA promulgated NO<sub>x</sub> SIP Call to address ozone levels in the southern and north-central regions of the United States. It requires 22 states, including Virginia, and the District of Columbia to reduce NO<sub>x</sub> emissions. The overall reduction is ultimately expected to be approximately 65%.<sup>96</sup>

## (2) Water

The project includes the construction of a 12-inch water supply line from the Bowler's Mill Reservoir to the site of the generation facility, a ground level water storage tank, and a water pumping station.<sup>97</sup> The 2-million gallon demineralized water storage tank will be used to suppress NO<sub>x</sub> formation when the unit is burning oil. Raw water from the Bowler's Mill Reservoir will be piped approximately 2.3 miles to the site during warm weather for inlet air conditioning to improve the efficiency of the units.

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<sup>94</sup>Trinity Report at 1-3.

<sup>95</sup>Motion to Supplement, Attachment 3, Trinity Report, at 1-4.

<sup>96</sup>Exhibit DNS-4, at 5.

<sup>97</sup>Exhibit KFA-1, at 7.

The DEQ coordinated a review by various state and local agencies responsible for permits associated with ODEC's Louisa project. Part of that review resulted in recommendations that related to water withdrawal from the Reservoir. Specifically:

1. The Department of Game and Inland Fisheries ("DGIF"), the Department of Environmental Quality's Office of Water Permits, and the Department of Environmental Quality's North Regional Office requested documentation to support its estimate of 0.897 MGD water withdrawal from Bowler's Mill Lake to serve the project, before construction begins;
2. The DGIF recommended that the water taken from the Reservoir to serve the project should not exceed the inflow to it, or 20% of the mean annual flow of Dove Fork, the largest of the three feeder streams, whichever is less;
3. The DGIF recommended that ODEC should establish a surrogate gauging station or define proportional flows in Bowler and Happy Creeks in order to establish acceptable releases from the Reservoir and subsequent flows from Dove Fork;
4. The DGIF recommended that ODEC should develop a monitoring and compliance plan to record water withdrawals and release rates;
5. The DGIF recommended that ODEC should establish a conservation drawdown in the Reservoir of five feet below the maximum depth (22 feet); and
6. The DGIF recommended that ODEC should gather pre-project baseline data, and then monitor water quality in the Reservoir semi-monthly from January through March for low-range alkalinity and pH.<sup>98</sup>

ODEC advised that documentation verifying a safe yield from the Reservoir of 0.8979 gallons per day has been provided. ODEC estimates a maximum withdrawal rate of 0.36 to 0.43 million gallons per day,<sup>99</sup> or well below the safe yield of the Reservoir. ODEC, however, took issue with the other recommendations made by the DGIF.<sup>100</sup>

ODEC argued that it was not the owner, operator, or the permittee authorized to draw water from Bowler's Mill Reservoir. Bowler's Mill Reservoir is owned by Louisa County and the Town of Gordonsville, and ODEC intends to purchase the water from Louisa County through the Louisa County Water Authority. ODEC asserts that it has no control over the use of the Reservoir or the amount of water withdrawn. If a flow restriction, gauging station, monitoring and compliance plan, or conservation drawdown is needed, such measures should be developed with the parties that control the Reservoir. ODEC also takes exception with any requirement to monitor water quality semi-monthly from January through March for low-range alkalinity and pH. ODEC asserts that

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<sup>98</sup>Exhibit JAS-5, Appendix A, at 5.

<sup>99</sup>Exhibits PFG-2, at 5, and JAS-5, at 13.

<sup>100</sup>Exhibit DNS-4, at 8-14.

storm water runoff will be the only discharge into the Bowler's Mill Reservoir watershed. It will be treated prior to discharge and, therefore will not negatively affect the water quality in the Reservoir.<sup>101</sup> Moreover, ODEC witness Smith testified that the fuel oil storage tanks will be constructed in accordance with Virginia's Above Ground Storage Tank Regulations, and will include an impervious secondary containment to hold the contents of the tanks and additional precipitation, to avoid groundwater contamination.<sup>102</sup> ODEC, however, agreed that if the DEQ or the agencies responsible for water and air quality issues determine that air emissions from the project may impact water quality and such monitoring is warranted, it will work with the DEQ to develop such a program.<sup>103</sup>

The DEQ advised that ODEC may need a Virginia Water Protection Permit from DEQ, and that in processing that permit application it would give full consideration to the recommendations of the DGIF.<sup>104</sup> Moreover, the DEQ offered no response to ODEC's rebuttal on these recommendations, although it did offer further comment on air emissions. It would therefore appear that the DEQ intends to address the DGIF recommendations in its permitting, and the Commission need not add those requirements to any approval granted herein.

Also relevant to consideration of the environmental impact of this project, three corridors have been identified for routing the water pipeline. The preferred corridor for the water line primarily follows a route that is adjacent to existing roadways. Land use in the project area includes primarily undeveloped open space, agricultural land, and woodland. The water line would run adjacent to residential and industrial areas but no significant adverse impact is anticipated as a result of the construction and operation of the water supply line.<sup>105</sup>

### (3) Other potential impacts

The DEQ review included air and water concerns previously addressed, as well as recommendations in several other areas as follows:

- Comply with all the conditions of permits and approvals;
- Provide a copy of the completed archaeological survey to the Department of Historic Resources and consult, as appropriate, with that Department concerning the protection of archaeological resources identified in the survey or otherwise in the records of the Department, before construction begins;

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<sup>101</sup>ODEC's response to DEQ also addresses the concern of Public Witness Holmes with groundwater contamination. (Transcript 24). Although ODEC counsel advised that other regulatory agencies (the EPA and DEQ's Petroleum Program Division) have authority to protect against groundwater contamination, and a Virginia Pollutant Discharge Elimination System permit may be required by the DEQ, the record herein verifies that ODEC has taken appropriate measures to protect the environment in this regard. (Motion for Reconsideration, February 27, 2002, at 14).

<sup>102</sup>Exhibit DNS-3, at 7.

<sup>103</sup>Exhibit DNS-4, at 11.

<sup>104</sup>Exhibit JAS-5, Appendix A, at 4.

<sup>105</sup>Environmental Analysis, Attachment 2, Appendix A, Supplemental Environmental Analysis for Water Supply Line, page ES-1.

- Implement measures to protect trees during the construction phase of the project;
- Provide adequate information to the Department of Transportation ("VDOT") to facilitate analysis and recommendations by that Department relative to the management of construction traffic to the project sites, before construction begins. This information is required in order for the applicant to obtain a land use permit from VDOT;
- Use the least toxic herbicides or pesticides that are effective for landscape maintenance, in the event pesticides or herbicides are employed in connection with this project;
- Follow the principles of pollution prevention in constructing and operating the power plant and associated facilities.

ODEC did not take issue with any of those additional DEQ recommendations, and they should be included in any certificate issued by the Commission herein.

#### (4) Historic and Scenic Resources

Public witnesses also raised concerns with the impact of the project on the historic and scenic resources in the area, particularly with the potential impact on Montpelier and the Landmark National Forest. The Department of Conservation and Recreation's Division of Natural Heritage and the Department of Historic Resources reviewed the application as part of the DEQ coordinated review, and expressed no concerns.<sup>106</sup> Moreover, the project site is on approximately 92 acres with only 35 of those acres developed to construct the power plant. ODEC offered testimony that the plant will not be located in a historic district. Indeed, it would be located in close proximity to two Klockner Pentaplast manufacturing facilities, the Gordonsville Energy combined-cycle facility, and a sewage treatment facility.<sup>107</sup> Moreover, ODEC added that the plant will be visible only from Klockner Road, and will otherwise be well screened from view. It therefore should have no adverse visual effect on Montpelier or the Landmark National Forest.

#### *Competition*

The Commission must also consider whether a proposed project advances the goal of competition in Virginia. Staff witness Stavrou testified that, generally speaking, adding capacity not controlled by the incumbent utility is a desirable outcome; the conventional notion in the electric power industry positively correlates market power with ownership or control of generating capacity.<sup>108</sup> The proposed ODEC project will be in Dominion Virginia Power's service territory, and therefore the construction of the facility should have a mitigating effect on Dominion Virginia Power's market power.<sup>109</sup>

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<sup>106</sup>Exhibit JAS-5, Appendix A.

<sup>107</sup>Exhibit DNS-3, at 8.

<sup>108</sup>Exhibit JS-7, at 5.

<sup>109</sup>*Id.* at 5.

## *Economic Development*

The Commission should next consider the effect of a proposed project on economic development. Mr. Stavrou reported that although ODEC did not prepare an economic study to evaluate the impact of the facility on the regional economy, it expects to pay about \$1.2 million per year in property taxes.<sup>110</sup> Further, the water supply for the project will be purchased from the County,<sup>111</sup> and thereby provide another stream of revenue. ODEC also estimates that the facility will result in approximately \$22 million in gross payroll and local purchases during the construction period. Therefore, the project will have a positive financial impact on Louisa County.

## *The Public Interest*

### (1) Need

As already discussed, clear and uncontested evidence was offered by ODEC and Staff that the proposed project is necessary to provide continuing and reliable service to ODEC member cooperatives. With existing purchase power contracts expiring, ODEC requires additional sources of supply. The RFP process, monitored by Staff, allowed ODEC to consider several alternatives and develop a plan to meet its needs in a cost-effective and reliable manner. This project is a critical part of that plan. Meeting that need is in the public interest.

### (2) Rates of other regulated utilities

Under Virginia Code § 56-265.2 B (i) the Commission historically was required to find a proposed facility would have no material adverse effect upon the rates paid by customers of any regulated utility in Virginia. Although that Code section is no longer applicable to approval of electric generation facilities as is proposed herein, in the *Tenaska Remand Order* the Commission noted that the impact on rates "may also be considered as part of the public interest finding we must make under § 56-580 D (ii) of the Code."<sup>112</sup>

Mr. Stevens addressed the impact of this facility on the rates paid by the retail customers of ODEC's member cooperatives. He observed that the Virginia Electric Utility Restructuring Act caps non-fuel related rates for retail customers for some time, and therefore the project should not affect base rates. The project will affect ODEC's fuel costs and the wholesale power adjustment factor paid by those retail customers. However, Mr. Stevens also testified that the project should have a smaller impact on the fuel factor than the other alternatives offered in response to the Cooperative's RFP and considered by ODEC.<sup>113</sup>

The project will not have an adverse impact on the rates of any other regulated natural gas, water, or sewer company. Water will be drawn from the Bowler's Mill Reservoir and purchased from the Louisa County Water Authority. Wastewater will be taken to the Gordonsville

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<sup>110</sup>*Id.* at 4.

<sup>111</sup>Exhibit DNS-4, at 6.

<sup>112</sup>*Tenaska Remand Order* at 16.

<sup>113</sup>Exhibit JAS-5, at 7.

Wastewater Treatment Plant. Natural gas will be acquired on the spot market, and Staff confirmed that ODEC had several viable options for those purchases.

### (3) Oil Tank Truck Transportation

The public witnesses in this case raised two other issues that could affect the public interest. Specifically, both Messrs. Holmes and Snyder contended that the tanker truck traffic generated by refueling the oil tanks would be a hazard and contrary to the public interest. This was also one of the issues raised by public witnesses in *Tenaska*, and one of the issues remanded to the Examiner in that case.<sup>114</sup> In addition, VDOT offered comments through the DEQ coordinated review. It advised that the application did not contain any analysis of potential transportation impacts associated with construction or operation of the plant. VDOT could not therefore offer comment or assess the traffic impacts of the proposed facility, or make specific recommendations. It did comment that the plant would be accessed via Route 809 which intersects Route 231, and that Route 809 may not be adequate to handle the heavy truck traffic expected during construction. Moreover, VDOT advised that safety issues needed to be examined.<sup>115</sup>

Unfortunately, ODEC offered no response despite ample opportunity to address traffic concerns. Indeed, it responded to an opportunity to reopen the record by advising that the record was adequate to support its application. I have found no evidence addressing this issue other than Mr. Smith's rebuttal testimony in which he advised that a traffic analysis would be developed in coordination with VDOT and Louisa County.<sup>116</sup> Thus, the record fails to support a finding that traffic will not adversely affect the surrounding area, nor did the public witnesses offer evidence that there would be a negative effect. Moreover, the County may have addressed traffic concerns in its consideration of zoning changes necessary for the project. In addition, the DEQ comments recommend that adequate information should be provided to VDOT relative to management of construction traffic, and advise that ODEC is required to obtain a land use permit from VDOT. This issue thus may be adequately addressed elsewhere. I note in particular that Senate Bill 554 was passed by the Legislature in 2002 (Acts of Assembly 2002, Ch. 483) and amends §§ 56-46.1 and 56-580 of the Code.<sup>117</sup> That legislation was passed to avoid the duplication of governmental agencies' reviews but this record is not clear as to the scope of any other review on this issue. I will recommend that ODEC be required to advise the Commission what, if any, agency or locality has addressed the impact of the project, during both construction and operation, on the County's transportation infrastructure. ODEC's report to the Commission should include, but not be limited to, the factors considered, and the conclusions reached by the agency or locality. If no other agency has considered such transportation issues, ODEC should be required to supplement the record herein before a certificate is issued.

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<sup>114</sup>*Tenaska Remand Order*, at 29-32.

<sup>115</sup>*Id.*, Appendix A, DEQ comments.

<sup>116</sup>Exhibit DNS-4, at 13.

<sup>117</sup>Those Code sections were amended to prevent a duplication of functions by state agencies.

#### (4) Emergency Response Plan

Mr. Holmes with the PEC raised one final concern that could adversely affect the public interest. He contends that ODEC does not have an adequate emergency response plan.<sup>118</sup> Again, this issue was raised and remanded in the *Tenaska* case.<sup>119</sup> ODEC did not offer evidence to rebut Mr. Holmes despite a specific invitation to do so, although ODEC counsel represented that ODEC did not have an emergency response plan but would be developing one in consultation with the Louisa County Emergency Services Coordinator.<sup>120</sup> ODEC further contends that such a plan is a local concern.<sup>121</sup> Often, localities fully address emergency response plans, but the record is not clear whether or not this matter has been adequately addressed. ODEC should be allowed to also offer supplemental evidence on this issue. ODEC should be directed to file supplemental evidence to advise the Commission what, if any, agency or locality has addressed an emergency response plan, what was considered, and what conclusions were reached. If no other agency has considered such issue, ODEC should be required to supplement the record herein before a certificate is issued.

### **FINDINGS AND RECOMMENDATIONS**

Based on the evidence received in this case, and for the reasons set forth above I find that:

1. The March 29, 2002, ODEC Motion to Supplement Record should be granted;
2. The facility will have no material adverse effect upon the reliability of electric service provided by regulated public utilities, and will enhance the reliability of service to Virginia cooperatives that are ODEC members;
3. The current level of air quality in Louisa County is good, and is in attainment of all National Ambient Air Quality Standards;
4. ODEC's cumulative impacts analysis in this case is reasonable, tends to overstate potential ground level concentrations of nitrogen oxides, sulfur dioxide, particulate matter, and carbon monoxide from existing and proposed sources, and potential ground level concentrations of ozone;
5. The cumulative analysis adequately demonstrates that the facility's emissions, when combined with the emissions from 22 other existing or proposed facilities, will have no material adverse effect on the NAAQS in Louisa County and surrounding counties;
6. The facility will have no other adverse environmental impact;

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<sup>118</sup>Transcript 24.

<sup>119</sup>*Tenaska Remand Order* at 33-34.

<sup>120</sup>Motion for Reconsideration, February 27, 2002.

<sup>121</sup>*Id.* at 13.

7. The facility's emissions will have no material effect on economic development in Louisa County and the surrounding counties because the analysis shows no significant deterioration of air quality and maintenance of levels below the NAAQS;

8. The evidence supports a finding that the facility will have no adverse effect on competition;

9. ODEC established a need for the additional capacity;

10. The facility will have no greater impact on the rates of ODEC member cooperatives' rates than other alternatives which address the capacity need;

11. The proposed facility will have no material adverse effect on the rates paid by consumers of any regulated natural gas, water or sewer public utility in Virginia;

12. ODEC should comply with the DEQ recommendations except that the DEQ will directly address the DGIF recommendations;

13. The facility is not otherwise contrary to the public interest; and

14. ODEC should file additional information related to traffic concerns and an emergency response plan as discussed herein.

I therefore **RECOMMEND** the Commission:

1. **GRANT** ODEC's March 29, 2002, Motion to Supplement the Record;

2. **GRANT** ODEC authority and a certificate of public convenience and necessity pursuant to § 56-580 D of the Code of Virginia to construct and operate a generation facility in Louisa County as described above;

3. **PROVIDE** that the certificate is conditioned on the receipt of all environmental and other permits necessary to operate the facility, and verification of receipt of those permits by filing a list of all such permits and when each was received; and

4. **FURTHER PROVIDE** that the certificate will expire two years from the date of a final order if construction has not commenced by that date.

### **COMMENTS**

The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and 5 VAC 5-20-120 C) to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen (15) copies, within fourteen (14) days from the date hereof. The mailing



address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

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Deborah V. Ellenberg  
Chief Hearing Examiner